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Atty. Dkt. No. WEAT/0535

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REMARKS

This is intended as a full and complete response to the Office Action dated August 9, 2005, having a shortened statutory period for response set to expire on November 9, 2005. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1, 5-18, and 23-34 are rejected by the Examiner. However, please note that the Examiner overlooked specific rejections for claims 14 and 15. Claims 1, 5-18, 24-29, and 32-41 remain pending in the application after entry of this response. Claims 1, 5, 10, 13, 24, 28, 29, 32, and 33 have been amended and new claims 35-41 have been added. No new matter has been added by either the amendments or new claims. Claims 23, 30 and 31 have been canceled without prejudice. Reconsideration of the rejected claims is requested for reasons presented below.

Claim Objections

Claims 1, 8, 10, and 13 were objected to for various informalities. Claims 1, 10, and 13 have been amended to overcome the objection. Withdrawal of the objection is respectfully requested.

Claim Rejections – 35 USC § 102

Claims 1, 8, 12, 13, 23, 26, 27, 30, and 34 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Grimmer* (U.S. Pat. No. 3,051,243). Regarding claim 1 and its dependents, *Grimmer* does not teach, suggest, or disclose a tool, "wherein a length of the sleeve flow port substantially corresponds to a length of the housing flow port;" and comprising "an adapter having a length substantially the same or greater than the length of the sleeve flow port;" as recited in amended claim 1. The equalization port 77 cited by the Examiner no longer applies because it is only about one-fourth the length of flow port 44. *Grimmer* discloses three seal assemblies: 46, 56, and 65,66 (although *Grimmer* does not specifically denote 65,66 as a seal assembly). None of the adapters in any of these assemblies are even half as long as one of the flow ports 75 of the valve sleeve 70. Therefore, claim 1 and its dependents are not anticipated by *Grimmer*.

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Regarding claim 13 and its dependents, *Grimmer* does not teach, suggest, or disclose a seal assembly, wherein "a length of one of the adapters is greater than the combined length of the rest of the seal assembly," as recited in amended claim 13. Of the above recited three seal assemblies, none of the adapters are even half as long as the rest of the seal assembly. Therefore, claim 13 and its dependents are not anticipated by *Grimmer*.

Claims 1, 12, 26, and 27 stand rejected under 35 U.S.C. 102(e) as being anticipated by *Jackson* (U.S. Pat. No. 6,860,330). *Jackson* does not teach or disclose a substantially chevron-shaped sealing element as recited in amended claim 1. *Jackson* does not describe seal stacks 51,52 in enough detail to discern the shape of the individual seals and only shows them as a black rectangle in the drawings.

Jackson and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person. Therefore, the Examiner is precluded by 35 U.S.C. §103(c) from using *Jackson* in a later 35 U.S.C. §103(a) rejection.

Claims 1 and 26 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Bassinger* (U.S. Pat. No. 2,317,021). *Bassinger* does not teach or disclose a sleeve flow port having a length that substantially corresponds to a length of the housing flow port as recited in amended claim 1. The length of one of the mandrel 27 radial ports 28 is only about half that of one of the housing 12 radial ports 16. Therefore, claim 1 and its dependents are not anticipated by *Bassinger*.

Claims 13, 16, 18, 28, 29 and 31-33 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Tausch* (U.S. Pat. No. 2,888,080). *Tausch* does not teach, suggest, or disclose a center adapter that is in direct contact with two oppositely oriented substantially chevron-shaped sealing elements, as recited in amended claim 13. *Tausch* discloses a coupling (unlabeled, but has opening 48 therethrough, hereinafter coupling 48) disposed between a lower end adapter of packing 39 and an upper end adapter of packing 40 which is not in direct contact with chevrons of either of the packings 39,40. Therefore, claim 13 and its dependents are not anticipated by *Tausch*.

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Regarding new claim 41, claim 41 is claim 10 (before current amendment of claim 1 and slightly amended) redrafted in independent form. Claim 10 was not rejected under 35 U.S.C. 102.

Claim Rejections – 35 USC § 103

Claims 1 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Murray* (U.S. Pat. No. 5,316,084) in view of *Bassinger*. Also regarding new claim 41, Applicants respectfully traverse the Examiner's cited motivation to combine. *Murray* discloses a dual mode tool meaning that the tool will either seal high pressure exterior to the tool from low pressure interior to the tool or vice versa. However, *Bassinger* discloses a single mode tool only sealing high pressure in the interior of the tool from low pressure exterior to the tool. Referring to Fig. 6 of *Bassinger* if a high pressure fluid is acting on the exterior of the tool, it would travel through housing radial ports 16 and along the annulus between the housing 12 and the mandrel 27, then compress packing rings 23, and readily leak through mandrel radial ports 28. This is because chevron seals are directional sealing elements. They utilize a pressure difference acting across them to increase flow resistance in one direction (flaring outwardly). However, if the pressure difference is reversed, then they will collapse inwardly, thereby offering little resistance to flow. *Bassinger* is merely stating this fact in the passage cited by the Examiner (pg. 2, col. 2, lines 1-13) to highlight the increased flow resistance when the chevrons are flared outwardly. However, it is also at this point, that they are susceptible to damage. As discussed below, *Bassinger* does not even shift his tool during high pressure exposure. Further, *Murray* already incorporates equalization ports and a flow diffuser ring 113 to protect his chevron stacks. Therefore, combination of *Murray* and *Bassinger* is improper. Withdrawal of the rejection is respectfully requested.

Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Grimmer* in view of *Baugh* (U.S. Pat. No. 5,611,547). As discussed above, *Grimmer* does not teach, suggest, or disclose "a tool, "wherein a length of the sleeve flow port substantially corresponds to a length of the housing flow port;" and comprising "an adapter having a length substantially the same or greater than the length of the sleeve flow port;" as recited in amended claim 1. *Baugh* also does not teach, suggest,

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or disclose these claim elements. As discussed in the Response to Office Action dated August 9, 2005, *Baugh* never discloses that either the mandrel 10 or the liner 50 have a flow port, much less both of them. Thus, *Baugh* cannot disclose that the length of any part of the seal assembly is related to a flow port in the mandrel 10 (or the even a flow port in the liner 50 or even any flow port for that matter). Therefore, claim 1 and its dependents are non-obvious over *Grimmer* in view of *Baugh*.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bassinger* in view of *Grimmer*. Also regarding new claim 41, Applicants respectfully traverse the Examiner's cited motivation to combine. *Bassinger* has no need to protect the packing rings 23,25 for at least two reasons. The first is that *Bassinger's* tool is only shifted before and after cement is pumped through it (pg. 3, col. 1, line 67-col. 2, line 53). Therefore, the pressure differential across the packing rings 23,25, during shifting, is insignificant. Secondly, the mandrel radial ports 28 are short in length, small in diameter, and small in number (four in each row). Therefore, even if there were a significant pressure differential, the risk of damaging packing rings 23,25 is relatively low. Therefore, the combination of *Bassinger* and *Grimmer* is improper. Withdrawal of the rejection is respectfully requested.

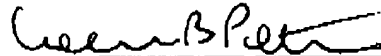
Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Grimmer* in view of *Murray*. As discussed above, *Grimmer* does not teach, suggest, or disclose a tool, "wherein a length of the sleeve flow port substantially corresponds to a length of the housing flow port;" and comprising "an adapter having a length substantially the same or greater than the length of the sleeve flow port;" as recited in amended claim 1. *Murray* also does not teach, suggest, or disclose these claim elements. The length of *Murray's* adapters 201,209,217 (usually labeled as sealing means 109,110) are insignificant when compared to the length of fluid slots 208 (grouped with equalization inlets 210 as fluid flow ports 116 in earlier figures). Therefore, claim 1 and its dependents are non-obvious over *Grimmer* in view of *Murray*.

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Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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